

# Karner Blue Biology Frequently Asked Questions

A DNR factsheet supporting Wisconsin's Statewide Karner Blue Butterfly Habitat Conservation Plan



#### What do adult Karner blues look like?

Karner blues are small, with a wingspan of about one inch. The wing top sides of male butterflies are deep sky blue, while those of the female are darker blue and brown with orange spots on the edges of both hind wings. Both sexes can be identified by the bands of orange spots on the underside edge of their wings.

### What do Karner blue caterpillars look like?

Karner blue caterpillars (larvae) are pale green and 2 to 14 millimeters long, depending on their age. They are usually found feeding on wild lupine leaves and are often guarded by ants that collect a sugary solution secreted by the caterpillars' bodies. It is very difficult to distinguish between Karner blue caterpillars and similar butterfly larvae.



Karner blue caterpillar and ant on wild lupine

## How many eggs are there in a Karner blue clutch?

Females release 1-3 eggs at a time and can release up to about 10 eggs per day.

### Where do Karner blues lay their eggs?

Karner blues typically lay their eggs on or near wild lupine plants, on the lower parts of the stems and petioles.

## How long does a Karner blue caterpillar feed before it pupates?

Caterpillars feed on wild lupine leaves for three to four weeks before pupating.

# What does a Karner blue pupa look like, and how long is the pupation period?

The pupa of a Karner blue is a small, brown, cocoon-like body attached to a firm surface, usually a wild lupine stem or a clump of leaf litter. Karner blues pupate for 5-11 days before they emerge as adults.

### How far do Karner blues travel?

Most Karner blues stay within about 200 meters of their home lupine patch, though some may disperse as far as 1.4 miles in a very open landscape.

## Where do Karner blues go in the winter?

The second annual generation of Karner blues lays eggs on lupine or nearby grasses at the end of summer. The eggs remain attached to the plants through the fall and winter, when the plants die back and are covered by winter snows. Snow cover may insulate the eggs and cushion them from impact. These eggs hatch in mid-April to produce the first Karner blues of the year. For more information about the Karner blue life cycle, see the DNR Karner Blue Ecology fact sheet.

## How long do adult Karner blues live, and what do they eat?

Adult Karner blues usually live about 5-7 days, but may live longer. They feed on the nectar of wildflowers and get minerals from drying water puddles or dung.



Karner blue males on butterfly weed

### What is the Karner taxonomic classification?

The Karner blue butterfly is one of six subspecies of *Lycaeides melissa*, commonly known as the Melissa blue. It is in the Lycaenidae (Gossamer-Winged Butterfly) family.

### Where are Karner blues found?

The Karner blue (*Lycaeides melissa samuelis*) currently occurs in at least seven different states — Wisconsin, Michigan, Minnesota, Indiana, New Hampshire, New York and Ohio. The Karner blue lives in open areas with sandy soils that support the wild lupine plant.